Claims

[c1] What is claimed is:

1.A device for acheiving network protocol indepedence comprising:A Physical Layer;An Application Layer; and A Smart Network Layer which interfaces the Physical Layer with the Application Layer.

2.The device in claim 1 further comprising:Said Physical Layer has two sub-levels, the Physical Medium which is an interface to the transmission means and the Physical Transmission layer which handles the transmission of data on a communcaition means.

3. The device in claim 1 further comprising:Said Smart Network Layer consists of the following sub-levels, the Network Routing which handles network routing and load balance, the Packet Transport which handles packet transportation, and the Data Encryption which handles data security.

4. The device in claim 1 further comprising the if the physical network does not implement network services required by the Application layer, the Smart Network layer will implement said services.

5. The device in claim 1 further comprising the Data Encryption sub-layer implementing one or more encryption algorithms.

6. The device in claim 1 further comprising said Physical Layer being based in hardware.

7. A method for achieving network protocol independence, the method comprising the steps of: Having a Physical Layer; Having an Application Layer; and Having a Smart Network Layer which interfaces the Physical Layer with the Application Layer.

8. The method in claim 7 in which said Physical Layer has two sub-levels, the Physical Medium which is an interface to the transmission means and the Physical Transmission which handles the transmission of data on a communication means.

9. The method in claim 7 in which said Smart Network Layer consists of the following sub-levels, the Network Routing which handles network routing and load balance, the Packet Transport which handles packet transportation, and the Data Encryption which handles data security.

10. The method in claim 7 in which if the physical network does not implement

network services required by the Application layer, the Smart Network layer will implement said services.

11. The method in claim 7 in which said Data Encryption sub-layer implementing one or more encryption algorithms.

12. A computer program wherein the base component has interfaces and the program code for: Having a Physical Layer; Having an Application Layer; and Having a Smart Network Layer which interfaces the Physical Layer with the Application Layer.

13. A computer program product of claim 12 wherein the base component has interfaces and the program code for said Physical Layer to have two sub-levels, the Physical Medium which is an interface to the transmission means and the Physical Transmission which handles the transmission of data on a communication means.

14. A computer program product of claim 12 wherein the base component has interfaces and the program code for said Smart Network Layer to consist of the following sub-levels, the Network Routing which handles network routing and load balance, the Packet Transport which handles packet transportation, and the Data Encryption which handles data security.

15. A computer program product of claim 12 wherein the base component has interfaces and the program code for the Smart Network layer to implement network services required by the Application layer if the physical network does not.

16. A computer program product of claim 12 wherein the base component has interfaces and the program code for said Data Encryption sub-layer implementing one or more encryption algorithms.